

Condensate Generation Chart for Typical Screw Type Air Compressors

(Gallons per day ingested by a compressor)

Refrigerated Dryer:

Percent of intake moisture removed by compressor after cooler and separator: 68.0 %
 Refrigerated Dryer - Percent of intake moisture removed: 28.0 %
 Percent of intake moisture carried into plant: 4.0 %
 Total 100 %

Desiccant Dryer:

Percent of intake moisture removed by compressor after cooler and separator: 68.0
 Desiccant Dryer - Percent of intake moisture removed: 31.7
 Percent of intake moisture carried into plant: 0.3
 Total 100

Inlet Air Temp (F)	75 Hp (370 acfm)					100 Hp (500 acfm)				150 Hp (750 acfm)				200 Hp (1,000 acfm)			
	Relative Humidity (RH)																
	0	25	50	75	100	25	50	75	100	25	50	75	100	25	50	75	100
50	0	9	19	28	37	13	25	38	50	19	38	57	75	25	50	75	101
55	0	11	22	33	44	15	30	45	60	22	45	67	90	30	60	90	120
60	0	13	26	39	52	18	35	53	71	27	53	80	106	35	71	106	142
65	0	15	31	46	62	21	42	63	84	31	63	94	126	42	84	126	167
70	0	18	36	55	73	25	49	74	99	37	74	111	148	49	99	148	197
75	0	21	43	64	86	29	58	87	116	43	87	130	173	58	116	173	231
80	0	25	51	76	101	34	68	102	136	51	102	154	205	68	136	205	273
85	0	29	58	87	117	39	79	118	158	59	118	177	236	79	158	236	315
90	0	34	68	103	137	46	93	139	185	69	139	208	278	93	185	278	370
95	0	39	79	118	157	53	106	159	212	80	159	239	318	106	212	318	424
100	0	46	92	137	183	62	124	186	248	93	186	279	372	124	248	372	495
105	0	52	105	157	209	71	141	212	283	106	212	318	424	141	283	424	565
110	0	61	121	182	242	82	164	246	328	123	246	368	491	164	328	491	655
115	0	69	139	208	278	94	188	281	375	141	281	422	563	188	375	563	751
120	0	77	155	232	310	105	209	314	419	157	314	471	628	209	419	628	838

Procedure:

1. Determine the compressor horsepower, then use that section of the table corresponding to that horsepower.
2. Determine local inlet air Temperature and %RH.
3. Find the value at the intersection of the Temperature row and the RH column on the chart corresponding to your inlet conditions.
4. The result will be the amount of condensation taken in by that horsepower compressor per DAY.

Example:

1. One (1) 150 Hp compressor (rated at 750 cfm).
2. Ambient air Temperature = 75 °F and RH = 75%
3. The value at the intersection = 130 gallons ingested per day for that compressor.
4. Note that approximately 2/3 of this is supposed to be removed by the compressor separator (130 gal x 2/3 = 87 gallons).